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200 Arch St. An

Inaugural Essay

Passed March 6. 1829

on
Typhus Fever

For

The degree of Doctor of Medicine

In the

University of Pennsylvania

By

Joshua Y. Jones

of Pennsylvania

January 9th 1829

Typhus Fever.

So far as my personal observations extend, respecting the existence of this formidable disease, in this section of our happy country, I feel justified in the conclusion, that of late it has been much more prevalent than formerly, owing most probably, in a very great measure, to some peculiarity in the mode of living, which predisposes the system to its attack. Not less from this fact, than from the circumstance of its too frequently baffling the wisdom and united efforts of practitioners, by the obscurity of its nature and diversity of forms which it not unfrequently presents, I was induced to take this species of fever as a proper subject to engage my attention in the accomplishment of an inaugural dissertation.

²Typhus fever is found recorded by all nosological writers as a genus of continued fever, which

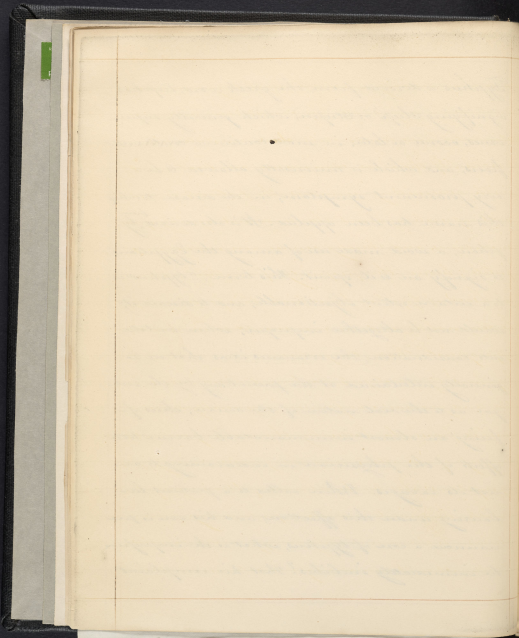
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according to different authors has received different divisions; thus, by Cullen continued fever is divided into three genera; by Sauvages into four; by Linnaeus into four; by Sagar into five; and by Vogel into twenty four. These divisions, reaching beyond the necessity of such minuteness, must, in a practical point of view, rather serve to perplex, than benefit the memory; therefore a division of continued fever into synocha or inflammatory and nervous or typhus merits a decided preference not only on account of its simplicity, but from the circumstance of its receiving the sanction of medical gentlemen, whose scientific attainments and tenets are altogether unimpeachable. When I assert that the latter division is most correct, I hold that my position is further corroborated by the opinion of Cullen in its favour, notwithstanding he has arranged continued fever into synocha, typhus, and synochus; for when speaking

of the last, he says, (to use his own words) "I think
that the limits between the synochus and ty-
phus will be with difficulty assigned; and
I am disposed to believe that synochus arises
from the same causes as typhus, and is therefore
only a variety of it." Trusting in the correctness
of the opinion of Cullen on this point, it
may be farther urged, that if a few symptoms
of typhus and inflammatory fever occurring
presenting themselves simultaneously to the
notice of the physician, should demand a
distinct title, we would, upon the same prin-
ciple be justified in introducing a new name
to a combination of any two or more symp-
toms from any two distinct diseases. From what
I have stated, I maintain that there is no such
fever as synochus, and to reject it as a species of
continua is in perfect accordance with my
humble opinion.

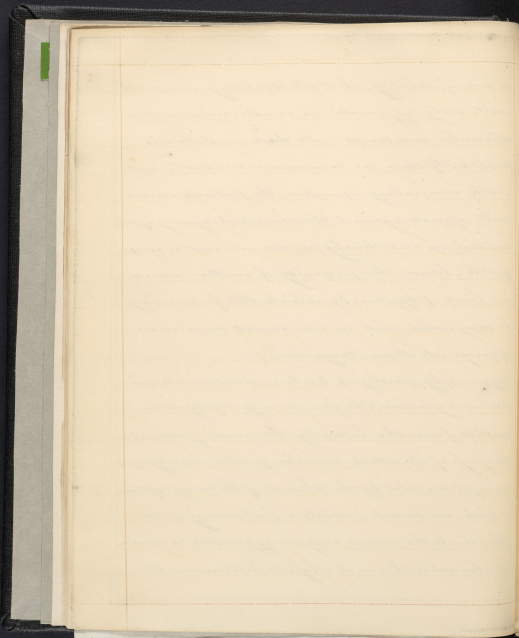
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Typhus is derived from the greek word, τυφος, signifying Sleep or Stupor, which generally supervenes, sooner or later, in most continued ~~or ad remittent~~ fevers, and which is universally allowed to be a very prominent symptom, in the disease to which this name has been applied. It is ^{from} the derived, typhon, a word made use of among the Egyptians to signify an evil spirit. This term, "Typhus" is to a certain extent objectionable, and to discard it, would not be altogether improper, when we take into consideration, the erroneous ideas, that are so generally entertained at the present day by the vulgar as to the real nature of the disease, thus offering an almost insurmountable barrier to the efforts of the physician in endeavouring to arrest its ravages. When called to a patient labouring under this affection, and his son is pronounced a case of typhus, what is the impression he immediately imbibes? That his complaint



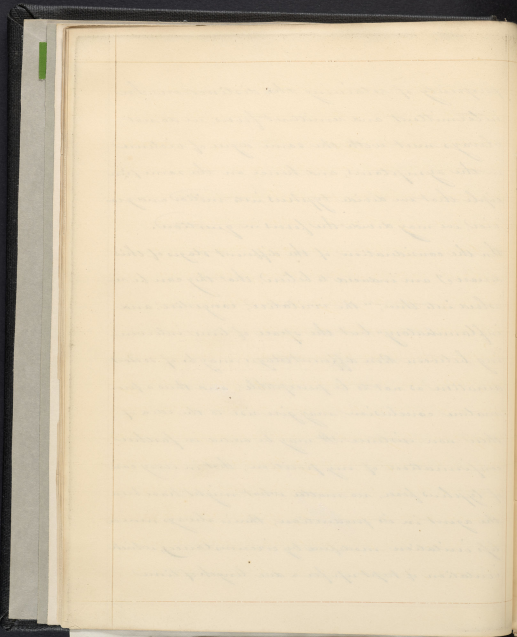
is one of debility, that all depleting measures will only aggravate his condition, and that stimuli and tonics will alone reinstate his health. If then we commence our treatment with evacuating remedies, the patient's mind will operate against the remedial agency of our medicines, and thereby render our endeavors futile; hence the propriety of another name in lieu of typhus by which this fever may be designated, and no one would seem more appropriate than, congestive.

Typhus, by nosologists, has been divided into mitis and gravior. The former is generally distinguished from the latter by the more gradual progress of its attack and the greater lenity of its symptoms; also by the absence of those symptoms which are said to indicate a putrescence of the fluids. As the one is only an aggravated condition of the other, I am at a loss to determine the



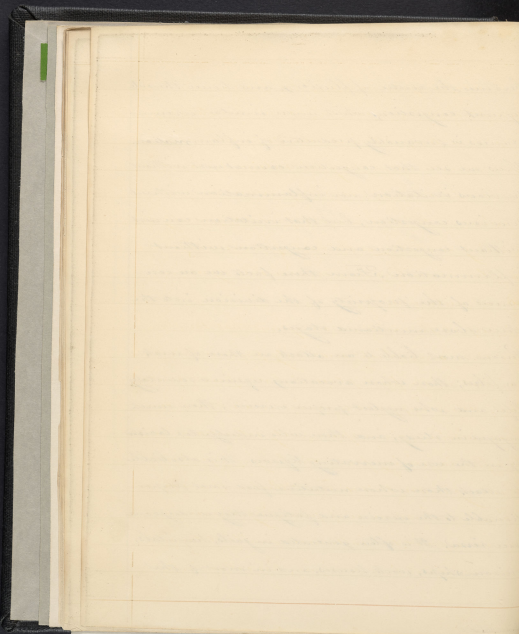
propriety of retaining the distinction. In
intermittent and remittent fevers, we do not
always meet with the same degree of violence
in the symptoms, and hence on the same prin-
ciple that we divide typhus into mitis and gra-
vis, we may divide the fevers in question.

In the consideration of the different stages of this
disease I am induced to believe, that they can be re-
solved into three; "the irritative, congestive, and
inflammatory," but the space of time interven-
ing between these different stages, may be of so short
duration as not to be perceptible, and thus a pre-
mature conclusion may give rise to the idea of
their non-existence. It may be added in further
confirmation of my position, that in every case
of typhus fever, no matter what might have been
the agent in its production, there is always more or
less irritation modified by circumstances, which
irritation if kept up for a due length of time



becomes the centre of fluxions, and hence the subsequent congestions which under similar circumstances is invariably productive of inflammation. Thus we see that congestion cannot exist without previous irritation; nor inflammation without previous congestion; but that irritation can exist without congestion and congestion without inflammation. From these facts we are convinced of the propriety of the division into the three above mentioned stages.

Persons most liable to an attack, are those of weak lax fibres; those whose avocations require a sedentary life, and who neglect proper exercise; those much engaged in study; and those who indulge too liberally in the use of enervating liquors. It is also liable to attack those whose nutritive food is not proportionable to the exercise and fatigue they undergo, and vice versa. It is often generated in jails, hospitals, prison ships, work-houses, and in most of the

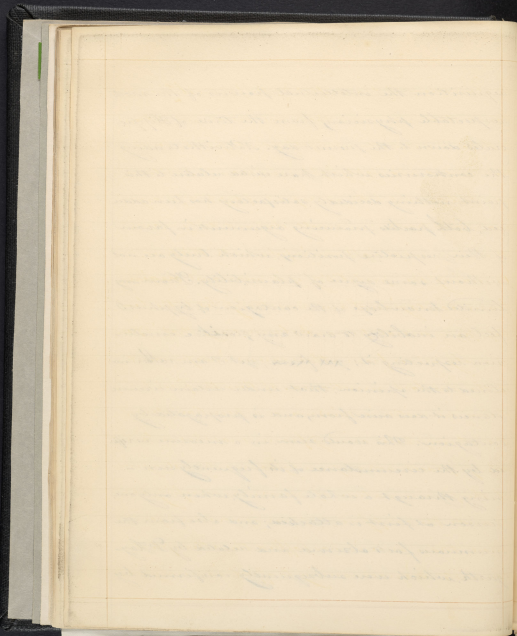


ill-ventilated apartments of the poor.

Typhus sometimes occurs in warm climates, though in the more temperate and cold, its prevalence is to a much greater extent. In Great Britain, it is said that typhus is favoured by a low temperature, being most prevalent in the cold months of winter, generally disappearing or abating as the heat of summer advances and often prevailing in a considerable degree in cold wet autumns.

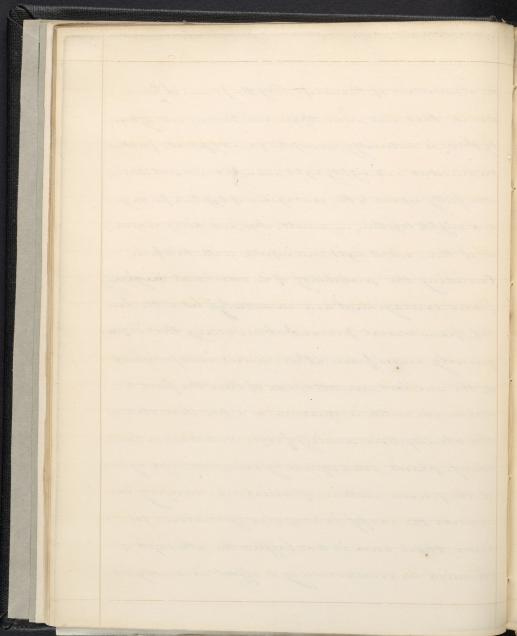
As it respects the causes, we are assured that there are more than one, which occasionally produce this disease, and in the first place I shall speak of contagion. This is supposed to consist in air, that is confined within a given space, fully saturated with the effluvia arising from the body of a patient labouring under this disease. Whether this is capable of communication, or of producing disease in a person exposed to its influence similar to the one from which it had its origin, has called into

acquisition the intellectual powers of the most respectable physicians from the time of Hippocrates down to the present day. Notwithstanding the controversies which have existed relative to this point, nothing decidedly satisfactory has been advanced, both parties producing arguments in favour of their respective positions, which truly are not without some degree of plausibility. From my limited knowledge of the contagion of typhus, I feel an inability to draw any positive conclusion respecting it; ~~yet from~~; yet I am rather inclined to the opinion, that under certain circumstances it does arise from, and is propagated by contagion. This would seem, in a measure verified by the circumstance of its frequently running through a whole family, when only one person at first is attacked; and also from the numerous facts observed and related by Haysgarth, which were subsequently confirmed by



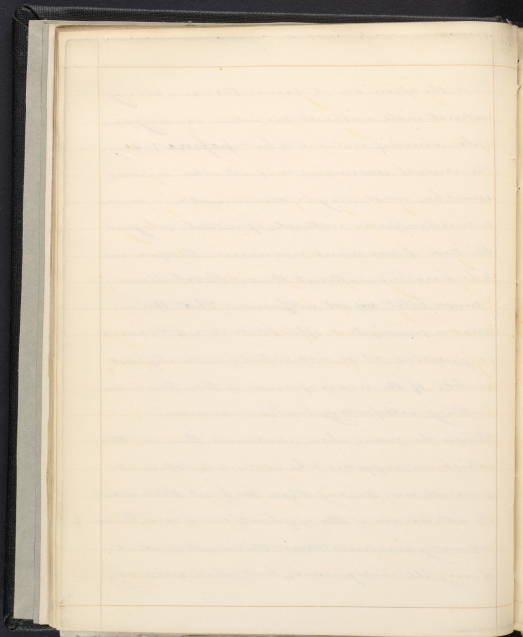
the observations of Bancroft. By the former it is men-
tioned that not more than one person out of twenty
by three is naturally exempted from typhus; for when
one hundred and eighty eight men, women, children,
were fully exposed to the contagion of typhus, for days
and nights together, in small, close, and dirty rooms,
all of them except eight were infected with this fever.

Considering the probability of its occasional origin,
from contagion, I am nevertheless led to the be-
lief, from several personal observations, that it fre-
quently arises from other causes independent
of the one last mentioned. Of these the first to
claim our notice is miasma, or a peculiar state of
the atmosphere, arising from marshes or low
damp places, acted upon by some external agent.
Of the precise nature of miasma, necessity de-
mands the confession of our ignorance; for
more than once it has baffled the attempt of
chemists in endeavouring to affect its analysis.

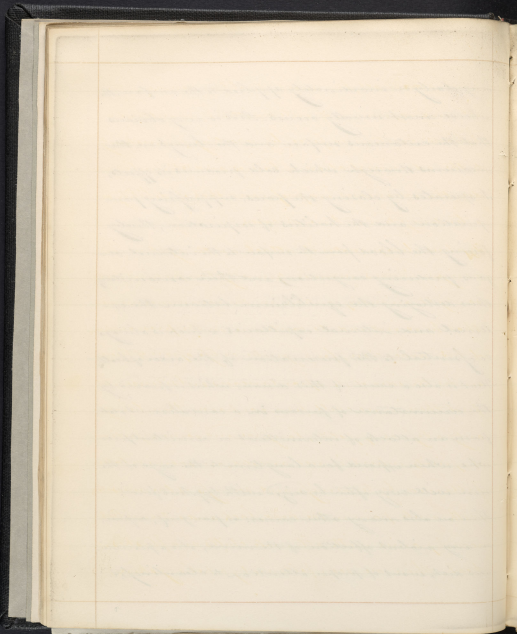


It is the opinion of some, that as nothing natural exists, without an active causing principle, which if natural is but *proxima*; being the cause of miasmata; as of all other diseases, must be, what may be denominated, in contra distinction from natural, spiritual, or beyond the ken of our senses and reason; therefore not to be discovered without the aid Revelations, "*causa latet, vis est manifestissima*." That this unknown principle is often productive of the disease in question, I do not entertain the slightest doubt. Of the *modus operandi* of these two causes nothing satisfactory has been advanced.

Besides the causes above mentioned there are others which are supposed to be instrumental in its production. Among these the first that merits attention is the application of cold. Under ordinary circumstances this is not productive of any ill consequences, but when suddenly,



irregularly or inordinately applied to the surface, the
reverse most usually occurs. As it is very obvious
that the cutaneous surface and the lungs are the
mediums through which cold produces its effects,
it operates by closing the pores, suppressing per-
spiration and the halitus of respiration, thereby
forcing the blood from the surface to the internal or-
gans, producing congestion, and their concomitants,
thus destroying the equilibrium between the ex-
ternal and internal capillaries, which is always
so essential to the preservation of the order of health.
That is also a cause of this disease, which is proved by
the circumstance of persons in a convalescent state
from an attack of intermittent or remittent fever
who when exposed for a long time to the rays of the
sun will very often be seized with typhus fever.
There are also many other causes: as fear, grief, despair,
or any violent affection of the mind; also a penur-
ous diet, want of proper attention to cleanliness &c.



But above all, the most prolific source is the ill management of intermittent, remittent or bilious continued fever, by resorting prematurely to the administration of tonics and Stimuli, under the erroneous impression that of debility, or a tendency to it in those diseases, especially

Typhus always makes its attack on the system in a very insidious manner. Generally the patient feels no slight indisposition in the commencement, that he is induced to continue in the prosecution of his avocation, for a greater or less space of time under the idea of its spontaneous subsidence. At first there is no chill, fever, nor pain, there being only a loss of appetite, languor, and some defection of spirits; which, if not arrested, are soon or later followed, by tenderness and soreness of the muscles, with acute pain in the head, back and extremities, accompanied with alternate chills and flushes of heat. These are soon followed by a hot dry skin;

